

# VEROBOARD®

## 6" LED Commercial Downlight Sloped Ceiling Reflector Square Trim

### SPECIFICATIONS



<b>Model No.*</b>	VBD-COM-6-XXXX-6SLS			
<b>Voltage</b>	120-347V AC			
<b>Frequency</b>	50/60Hz			
<b>Wattage</b>	20W			
<b>Input Current</b>	0.2A			
<b>Available Colour Temperatures</b>	<table border="1"> <tr> <td>WARM WHITE 3000K</td> <td>NATURAL WHITE 4000K</td> <td>DAY LIGHT 5000K</td> </tr> </table>	WARM WHITE 3000K	NATURAL WHITE 4000K	DAY LIGHT 5000K
WARM WHITE 3000K	NATURAL WHITE 4000K	DAY LIGHT 5000K		
<b>Brightness</b>	1570Lm			
<b>Trim Type</b>	Open Reflector Trim			
<b>Beam Angle</b>	70°			
<b>Colour</b>	White			
<b>Lifespan</b>	50,000 Hours			
<b>Dimmable</b>	Yes (0-10 Dimming)			
<b>Package Content</b>	J Box structured engine, Reflector trim			
<b>Dimensions (Reflector)</b>	Width & Length: 189mm (7.43") Overall Depth: 177.8mm (7")			
<b>Dimensions (Cut Size)</b>	154.5mm (6")			

\* Please see the "Ordering Guide" table at the bottom of this page for how to place your order.

### Features

- Comes with a 20W engine that has an inbuilt LED Driver, J-Box structured with good heat dissipation.
- Choose the options which best suits you. Warm White (3000K), Natural White (4000K), and Daylight (5000K).
- The 20W engine is compatible with all commercial lighting reflector trims (CPS series Model).
- Applicable for Indoor use only (dry and damp locations).
- Has a lifespan of 50,000 hours.
- It can be dimmed using a 0-10v dimmer.
- These commercial downlights come in 4 inches, 6 inches, in different shapes (Round, Square).
- We also carry this engine downlight for sloped ceilings in wall wash trims.
- Easy for installation with push springs.
- The J-Box engine has an anti-UV Frosted Polycarbonate Lens that helps in even light transmission, prevents discoloration.
- It is suitable for recessed lighting of commercial and public places and elegantly decorate the ambiance, in shopping malls, hospital, airport, hotel lobbies, and similar places.
- It is a highly efficient product with an Energy Star logo.

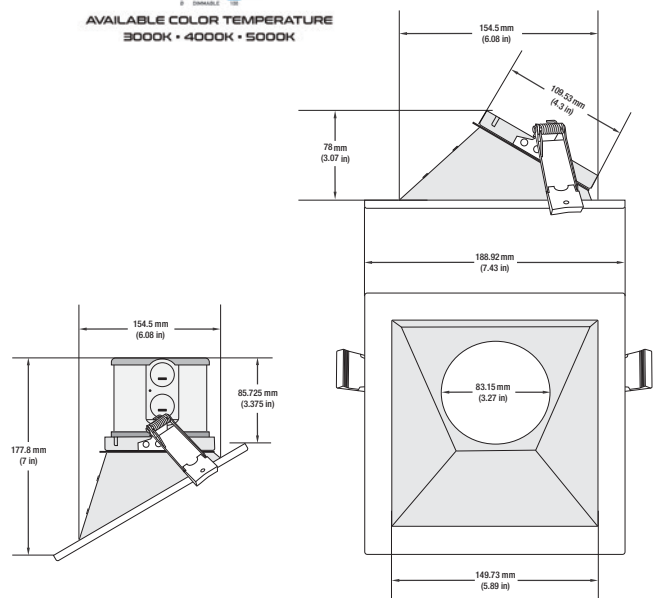
**ORDERING GUIDE**

Example part number: **VBD - COM - 6 - XXXX - 6SLS**

MODEL	SERIES	DIAMETER	COLOUR	REFLECTOR SHAPE
VBD	COM	XXX	XXXX	XXXX
		4"	3000K	6R 4S 4SLR 4SLR
		6"	4000K	8R 6S 6SLS 6SLR
		8"	5000K	



AVAILABLE COLOR TEMPERATURE  
3000K • 4000K • 5000K



### Safety and Warning

The fixture must be wired in accordance with local electrical codes. All the installation must be done by a certified electrician. Do not modify the product, any modification may render the product unsafe and void the warranty.



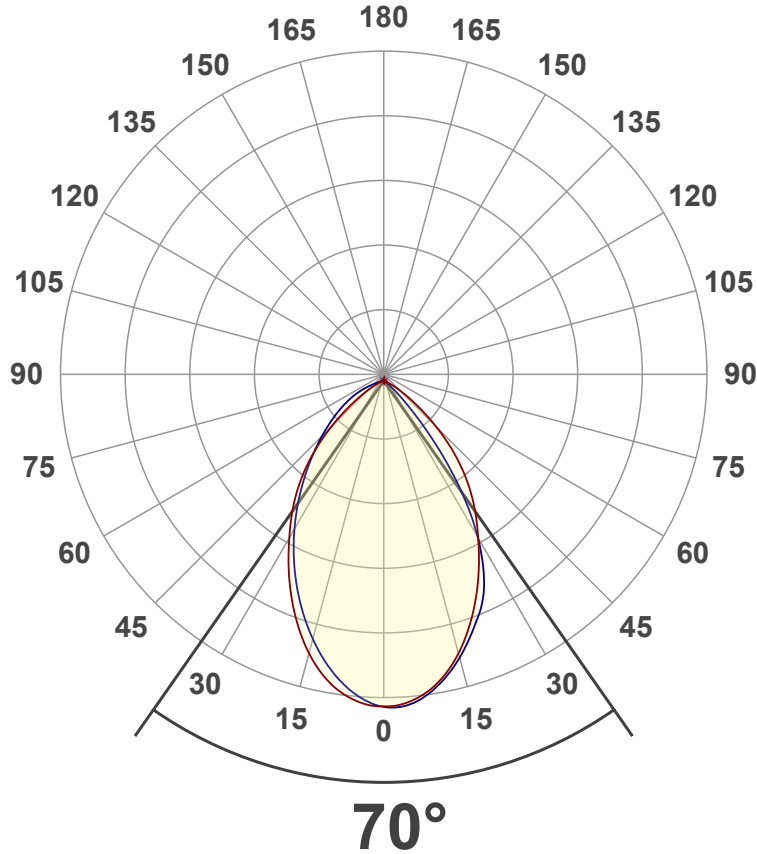
# Light Measurement Report

Print date: 2023-01-26

Measurement date and time: 2023-01-26 2:24:45 PM – Measurement no. VFR-230126-0019-MS

## Luminous Intensity diagram

Unit: 0-100% of peak intensity



### Main Values

Output (total Lumen)	1570 lm
Lumen Up% / Down%	0.17% / 99.83%
Peak Intensity	1218 cd
Beam Angle (50%)	70°
Beam Angle (90%)	66.5°
Beam Angle (10%)	70.1°

### Cut-off Angle

Average 2,5%	127.7°
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### Field Angle

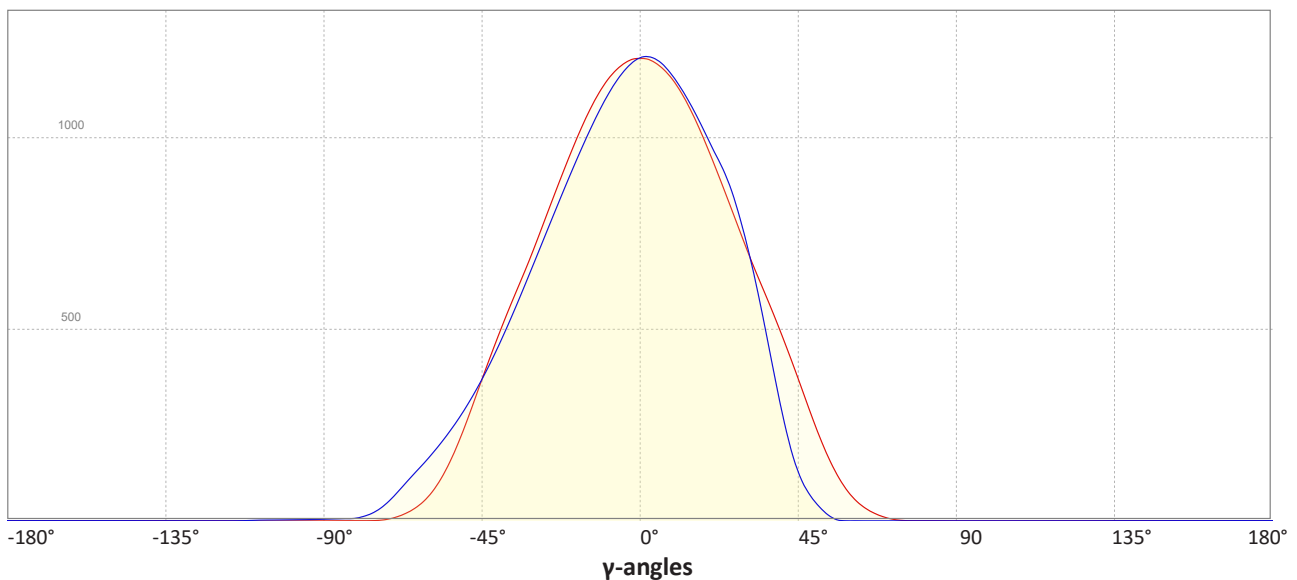
Average 10%	111°
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### Intensity Ratio

In 120° cone	96.3%
In 90° cone	82.2%

**C000-C180**  
**C090-C270**

## Linear distribution diagram - Intensity (candela) vs $\gamma$ -angle



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## Color details

Correlated Color Temperature, Target CCT = 3000 K  
 Correlated Color Temperature, Measured CCT = 2926 K  
 Color Rendering Index CRI 82.7  
 Color Rendering Index, R9 (red component) R9 = 6.7  
 Color Rendering TM30-18 R<sub>f</sub> 84.5 – R<sub>g</sub> 94.0  
 Color Quality Scale CQS = 82.0

MacAdam Steps  
 Color coordinates CIE 1931 (x;y) = (0.437;0.404)  
 Color coordinate CIEs 1960 (u';v') = (0.251;0.348)  
 Color deviation from BBL Duv = -0.0022  
 Color coordinate CIEs 1976 (CIELUV) (u'';v'') = (0.251;0.251)

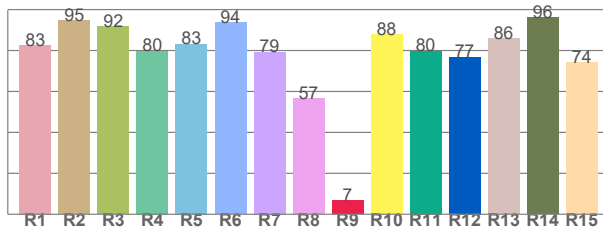
CIE 1931



CIE 1931 – zoomed on Planckian locus



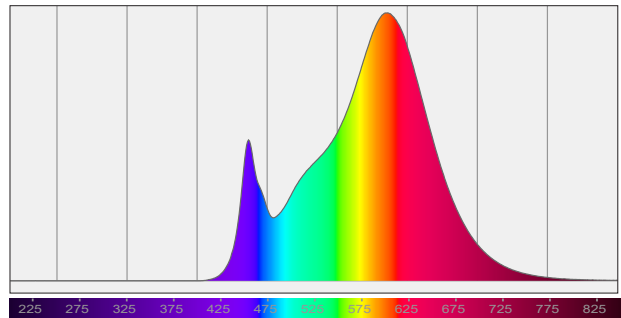
Color Rendering Index per reference color (CIE 1995)



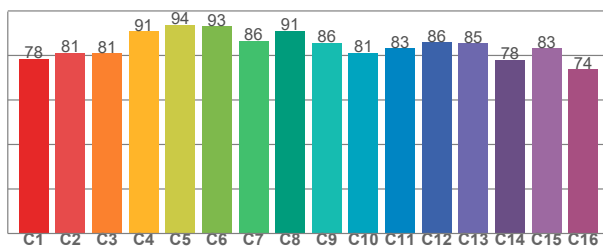
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
82.6	94.6	91.8	79.8	83.3	93.6	79.4	56.6	6.7	87.9	79.8	76.8	86.0	96.2	74.0

Spectral power distribution (SPD) / W/nm – 0-100%



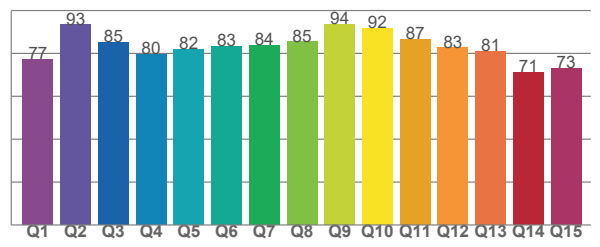
TM30-18 Rf-values per hue bin



TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
78.5	81.3	81.0	91.0	93.8	93.1	86.5	91.1	85.7	81.2	83.3	85.9	85.4	78.1	83.3	73.8

Color Quality Scale by reference color



CQS Q values

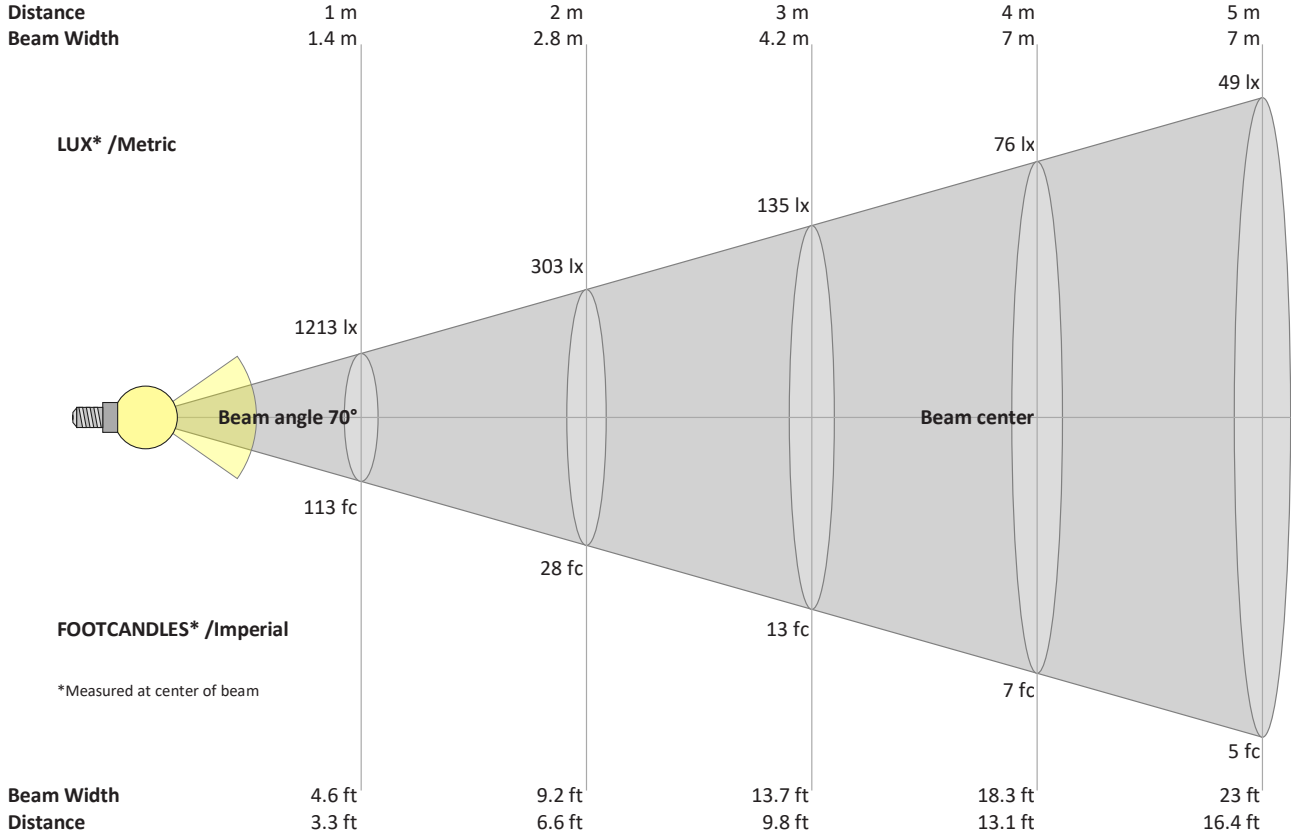
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77.1	93.3	85.3	79.6	81.9	83.5	83.7	85.4	93.5	91.6	86.7	82.6	81.1	71.2	73.2

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## Beam Details



### Beam intensities from 1 – 20 m

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	m
3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6	ft
1213	303	135	76	49	34	25	19	15	12	10	8	7	6	5	5	4	4	3	3	lux
112.7	28.2	12.5	7	4.5	3.1	2.3	1.8	1.4	1.1	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.3	fc

### Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	y
1213	1197	1147	1065	960	842	721	608	495	372	246	140	68	28	9	1	0	0	0	0	cd
100%	99%	95%	88%	79%	69%	59%	50%	41%	31%	20%	12%	6%	2%	1%	0%	0%	0%	0%	0%	of 0°val

### Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	y
1213	1207	1157	1081	989	890	737	531	303	131	48	8	0	0	0	0	0	0	0	0	cd
100%	99%	95%	89%	82%	73%	61%	44%	25%	11%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	of 0°val

### Intensities in 180° c-plane

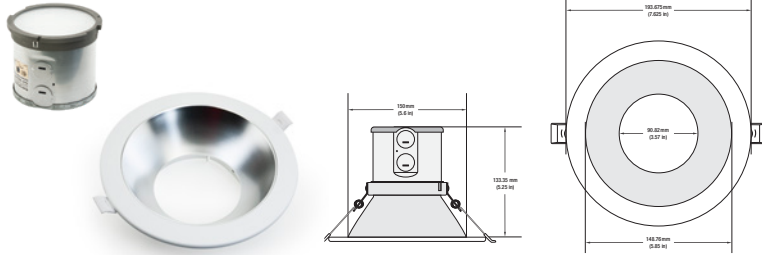
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	y
1213	1197	1147	1065	960	842	721	608	495	372	246	140	68	28	9	1	0	0	0	0	cd
100%	99%	95%	88%	79%	69%	59%	50%	41%	31%	20%	12%	6%	2%	1%	0%	0%	0%	0%	0%	of 0°val

### Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	y
1213	1175	1104	1011	906	795	682	571	466	373	292	225	168	117	66	27	9	5	4	3	cd
100%	97%	91%	83%	75%	66%	56%	47%	38%	31%	24%	19%	14%	10%	5%	2%	1%	0%	0%	0%	of 0°val

# AVAILABLE OTHER TRIM MODELS

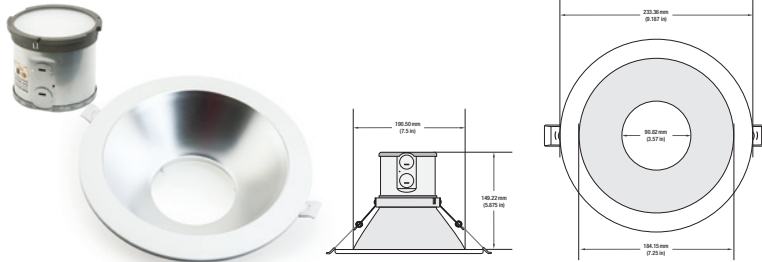
## 6" LED Commercial Downlight Reflector Round Trim



SKU: 66651415914



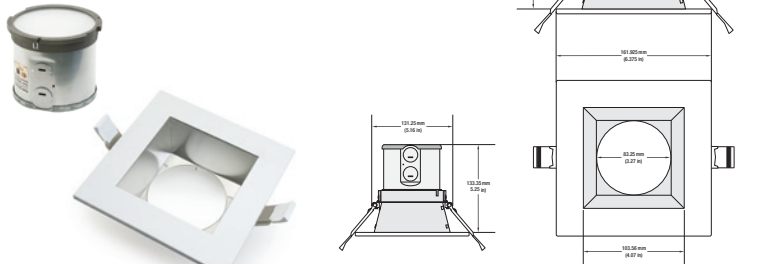
## 8" LED Commercial Downlight Reflector Round Trim



SKU: 66651415921



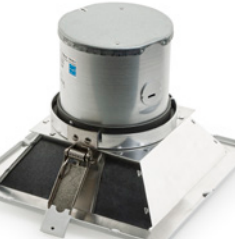
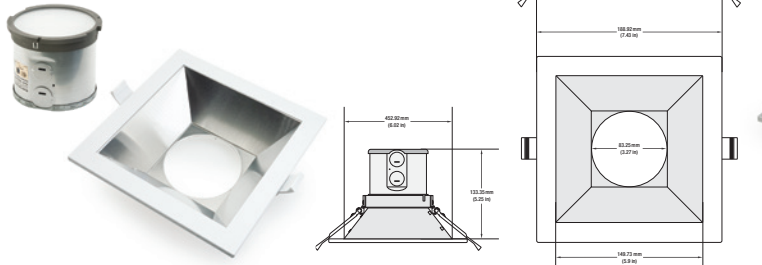
## 4" LED Commercial Downlight Reflector Square Trim



SKU: 666561419943



## 6" LED Commercial Downlight Reflector Square Trim

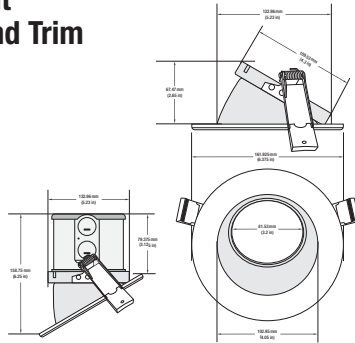


SKU: 666561419950



# AVAILABLE OTHER TRIM MODELS

## 4" LED Commercial Downlight Sloped Ceiling Reflector Round Trim

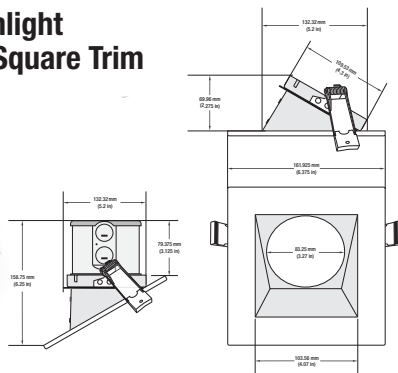


SKU: 666561419929



MODEL No. **VBD-COM-4-XXXX-4SLR**

## 4" LED Commercial Downlight Sloped Ceiling Reflector Square Trim

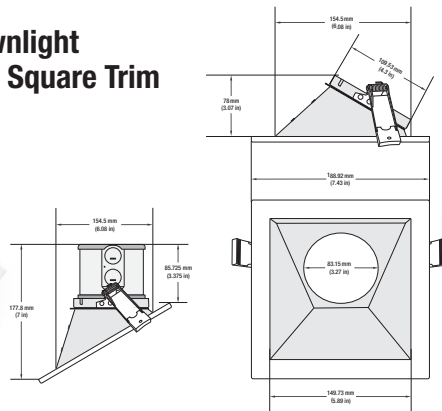


SKU: 666561419967



MODEL No. **VBD-COM-4-XXXX-4SLS**

## 6" LED Commercial Downlight Sloped Ceiling Reflector Square Trim



SKU: 666561419974



MODEL No. **VBD-COM-6-XXXX-6SLS**

### Notes:

### Disclaimer:

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